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Robert Duncan Doverspike

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EXAMINER

NGUYEN, DUSTIN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/604,471	Applicant(s) DOVERSPIKE ET AL.	
	Examiner DUSTIN NGUYEN	Art Unit 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 16 are presented for examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/02/2009 has been entered.

Response to Arguments

3. Applicant's arguments filed 03/02/2009 have been fully considered but they are not persuasive.

4. As per remarks, Applicants argued that (1) Charny fails to teach or suggest an unconnected and unconfigured spare interface.

5. As to point (1), in response to claimed limitation of connecting an unconnected spare interface, Charny teaches this limitation as addressed in previous Office Action [please see the

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response mailed on 03/19/2008]. In response to newly amended claimed limitation of connecting an unconfigured spare interface, Charny discloses backup tunnels can be assigned to individual LSP when failure condition is detected, wherein additional bandwidth can be allocated or increased for existing backup tunnels or new backup tunnels can be established [i.e. the capacity of the backup tunnels can be adjusted to accommodate the capacity of the failed LSP, broadly interpreted as unconfigured spare interface as claimed] [Abstract; col 2, lines 33-39; col 8, lines 17-21; and claim 1]. As such, the claims remain rejected over the cited prior art.

6. As per remarks, Applicants argued that (2) Charny and Yeh fail to teach or disclose “wherein switching comprising assigning the spare interface at the first router an IP address that is identical to an IP addresses of the primary interface at the first router”.

7. As to point (2), Examiner respectfully disagrees. As stated in previous Office Action, Charny discloses switching from primary interface to the spare interface upon detection of a failure [col 4, lines 27-46]. Charny does not specifically disclose assigning the spare interface at the first router an IP address that is identical to an IP address of the primary interface at the first router. However, the general concept of assigning IP address from one interface to another is well known in the art as taught by Yeh [i.e. when the active fails, the inactive must become active and assume responsibility, which requires switching the IP address for the active and inactive] [Figure 5; col 4, lines 55-67; and col 6, lines 37-54]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Charny

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and Yeh because the teaching of Yeh would enable to allow device requiring redundant systems to operate effectively in an Internet Protocol network environment [Yeh, col 1, lines 6-10].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 7-9, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charny et al. [US Patent No 6,778,492], in view of Yeh et al. [US Patent No 6,970,471].

10. As per claim 1, Charny discloses the invention as claimed including a method of operating an internet protocol (IP) network comprising a plurality of routers [i.e. IP routers] [Figure 2; and col 3, lines 46-57], each router further comprising a plurality of interfaces [i.e. plurality of network interfaces] [Figure 1; and col 8, lines 53-64], the method comprising the steps of:

connecting, as needed, an unconnected and unconfigured spare interface on a first router in the IP network to a re-configurable transport network which provides connectivity to an unconnected spare interface on a second router in the IP network [i.e. backup tunnels connect between routers] [304-308, Figure 3; 416, Figure 4; 508, 510, Figure 5; and col lines 1-56];

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upon detection of a pre-designated condition in the IP network [i.e. upon failure detect] [col 4, lines 27-30; and col 8, lines 9-15], switching traffic designated for a primary interface at the first router to the spare interface at the first router in the IP network [i.e. redirect to the backup tunnels] [col 4, lines 30-33], thereby causing the traffic to flow across spare capacity on the re-configurable transport network between the spare interface on the first router and the spare interface on the second router in the IP network [i.e. traverse or forward through the backup tunnel] [col 4, lines 33-44 and lines 44-46].

Charny does not specifically disclose

wherein switching comprises assigning the spare interface at the first router an IP address that is identical to an IP address of the primary interface at the first router.

Yeh discloses

wherein switching comprises assigning the spare interface at the first router an IP address that is identical to an IP address of the primary interface at the first router [i.e. when the active fails, the inactive must become active and assume responsibility, which requires switching the IP address for the active and inactive] [Figure 5; col 4, lines 55-67; and col 6, lines 37-54].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Charny and Yeh because the teaching of Yeh would enable to allow device requiring redundant systems to operate effectively in an Internet Protocol network environment [Yeh, col 1, lines 6-10].

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11. As per claim 2, Charny discloses wherein the pre-designated condition is a failure in the primary interface at the first router in the IP network [i.e. primary LSP traversing the failed element] [col 4, lines 30-33].

12. As per claim 3, Charny discloses wherein the primary interface provided connectivity to the re-configurable transport network before failure [col 6, lines 23-26] and wherein the spare interface provides 1:N interface protection [i.e. single backup tunnel] [Figure 4; and col 6, lines 31-42].

13. As per claim 7, it is rejected for similar reasons as stated above in claim 1. Furthermore, Charny discloses reconfiguring the routing table in the router [col 3, lines 51-57].

14. As per claims 8 and 9, they are rejected for similar reasons as stated above in claims 2 and 3.

15. As per claim 12, it is rejected for similar reasons as stated above in claim 7.

16. As per claims 13 and 14, they are rejected for similar reasons as stated above in claims 2 and 3.

Claim Rejections - 35 USC § 103

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17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 4-6, 10, 11, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charny et al. [US Patent No 6,778,492], in view of Yeh et al. [US Patent No 6,970,471], and further in view of Wing So [US Patent Application No 2002/0109879].

19. As per claim 4, Charny discloses wherein the spare interface provides dynamic establishment of a new IP link in response to the failure [i.e. establish a new backup tunnel] [Abstract; col 1, lines 44-46; and col 2, lines 36-38]. Charny and Yeh do not specifically disclose wherein the primary interface provided connectivity over a direct point-to-point link. Wing So discloses wherein the primary interface provided connectivity over a direct point-to-point link [paragraphs 0070, 0290 and 0347]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Charny, Yeh and Wing So because the teaching of Wing So would provide a method and system to configure and control optical communication networks that provides flexibility for the future while supporting legacy systems and components [Wing So, paragraphs 0001 and 0005].

20. As per claim 5, Charny and Yeh do not specifically disclose wherein the pre-designated condition is a surge in traffic across the primary interface at the first router in the IP network.

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Wing So discloses wherein the pre-designated condition is a surge in traffic across the primary interface at the first router in the IP network [i.e. busting of traffic] [paragraphs 0873 and 0993]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Charny, Yeh and Wing So because the teaching of Wing So would provide a method and system to configure and control optical communication networks that provides flexibility for the future while supporting legacy systems and components [Wing So, paragraphs 0001 and 0005].

21. As per claim 6, Charny and Yeh do not specifically disclose wherein the re-configurable transport network comprises a plurality of optical cross-connects. Wing So discloses wherein the re-configurable transport network comprises a plurality of optical cross-connects [i.e. OXC] [paragraphs 0073 and 0076]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Charny, Yeh and Wing So because the teaching of Wing So would provide a method and system to configure and control optical communication networks that provides flexibility for the future while supporting legacy systems and components [Wing So, paragraphs 0001 and 0005].

22. As per claims 10 and 15, they are rejected for similar reasons as stated above in claim 4.

23. As per claims 11 and 16, they are rejected for similar reasons as stated above in claim 5.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dustin Nguyen/
Primary Examiner, Art Unit 2154